

# **Exhibit A**

## Juniper Networks Claim Chart

U.S. Patent 9,852,004

System and method for parallel processing using dynamically configurable proactive co-processing cells

### References

[Reference 1] Zero Touch Wireless Deployment with Juniper Networks Switches and Aerohive Access Points

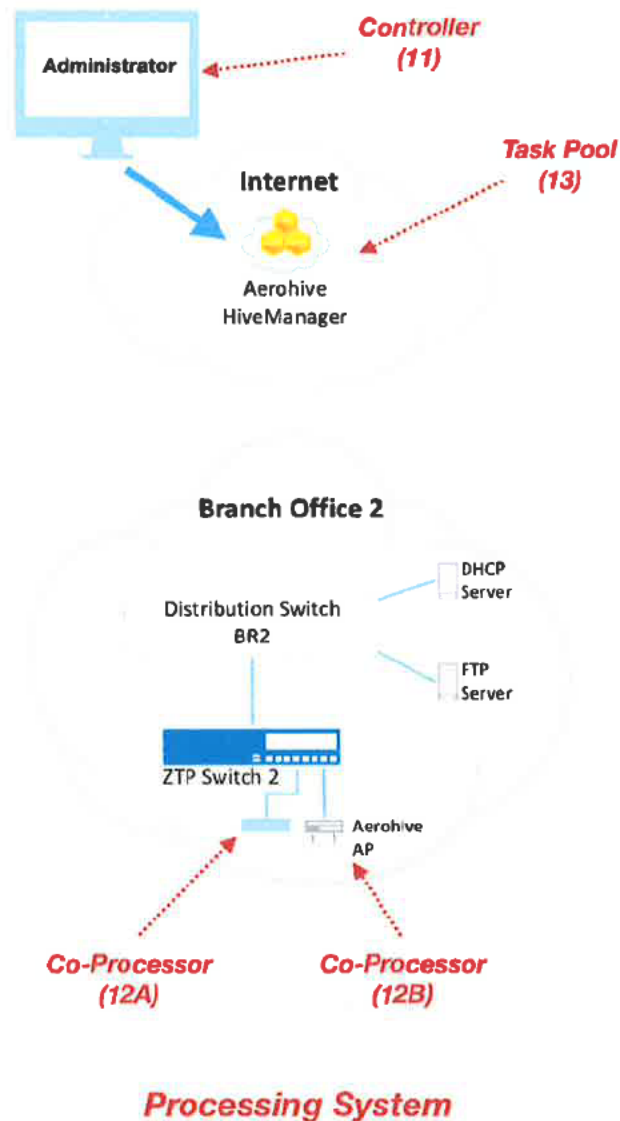
### Products currently using Zero Touch Provisioning

EX Series, MX Series, PTX Series, QFX Series, SRX Series  
See Appendix B for complete list of model numbers.

Patent '004 Claim Elements	Juniper
1. A <b>processing system</b> , comprising: a <b>task pool</b> ;	<p>The <b>processing system</b> is depicted on Appendix A.</p> <p>The Aerohive access point will establish communication with <b>HiveManager</b> and will automatically get its configuration and firmware [Reference 1, page 4]</p>
a <b>controller</b> configured to populate the task pool with a plurality of first <b>tasks</b> and a plurality of second tasks;	<p>Auto-provisioning allows <b>administrators</b> to quickly deploy Aerohive devices [Reference 1, page 4]</p> <p>The network administrator must set up the environment to support the ZTP process [Reference 1, page 6]</p> <p>Network administrators can manually prepare all <b>tasks</b> shown below:</p> <ul style="list-style-type: none"> <li>• Software image file name</li> <li>• Configuration file name</li> <li>• File transfer mode</li> <li>• Server IP address where these files are located</li> </ul> <p>[Reference 1, page 6]</p>
a first <b>co-processor</b> configured to successively: <b>retrieve</b> a first task from the task pool;	<p>With auto-provisioning, once an <b>Aerohive device</b> communicates with the HiveManager, the device will <b>automatically receive</b> the latest configuration and firmware. [Reference 1, page 4]</p>
<b>deliver</b> the first task to the first co-processor;	<p>The Aerohive access point will establish communication with HiveManager and will automatically <b>get</b> its configuration and firmware if auto-provisioning has been enabled [Reference 1, page 4]</p>
<b>process</b> the first task;	<p>This significantly shortens the time and effort required to <b>deploy</b> an Aerohive WiFi solution. [Reference 1, page 4]</p>
<b>generate</b> first <b>resulting data</b> ;	<p>The device <b>compares</b> the downloaded image file with the installed software version. If the downloaded image file is different from the installed software version, the downloaded software image is installed and the switch reboots. [Reference 1, page 11]</p> <p>At this point, the switch has the software image required for the device and also has the common <b>configuration file</b> intended for that device type. [Reference 1, page 11]</p>

and update the task pool to reflect completion of the first task, all without any communication between the first co-processor and the controller;	The AP connects to the Internet to reach HiveManager. With auto-provisioning enabled, once the AP establishes communication with HiveManager, the device will automatically receive the latest configuration and firmware. [Reference 1, page 12]
and a second co-processor configured to successively: retrieve a second task from the task pool;	With auto-provisioning, once an Aerohive device communicates with the HiveManager, the device will automatically receive the latest configuration and firmware. [Reference 1, page 4]
deliver the second task to the second co-processor;	The Aerohive access point will establish communication with HiveManager and will automatically get its configuration and firmware if auto-provisioning has been enabled [Reference 1, page 4]
process the second task;	This significantly shortens the time and effort required to deploy an Aerohive WiFi solution. [Reference 1, page 4]
generate second resulting data;	The device compares the downloaded image file with the installed software version. If the downloaded image file is different from the installed software version, the downloaded software image is installed and the switch reboots. [Reference 1, page 11]  At this point, the switch has the software image required for the device and also has the common configuration file intended for that device type. [Reference 1, page 11]
and update the task pool to reflect completion of the second task, all without any communication between the second co-processor and the controller;	The AP connects to the Internet to reach HiveManager. With auto-provisioning enabled, once the AP establishes communication with HiveManager, the device will automatically receive the latest configuration and firmware. [Reference 1, page 12]
wherein the processing system is configured to dynamically accept the first co-processor, the second co-processor, and an additional co-processor into the processing system on a plug-and-play basis without any communication with the controller.	By combining the ZTP capabilities of Juniper's switching platforms and the auto-provisioning capabilities of Aerohive access points, enterprises have a true Zero-Touch Deployment solution for both wireless and wired network deployments. [Reference 1, page 17]  The objective of this document is to demonstrate plug-and-play deployment of Juniper Networks® EX Series switches and Aerohive access points [Reference 1, page 3]

## Appendix A



This figure is shown in Reference 1, page 6.

### Notes:

The shown *Controller* – i.e., Administrator – and *Co-processor (12A)* were added to the original figure.

The words *Processing System*, *Task Pool*, *Controller*, and *Co-processor* were added to associate with the terminology used by Patent '004

## Appendix B

### Juniper Products using Zero Touch Provisioning

Source:

[https://apps.juniper.net/feature-explorer/feature-info.html?fKey=4161&f=ztp%20e2%80%93%20zero%20touch%20provisioning%20\(ez%20touchless%20provisioning%20using%20dhcp\)](https://apps.juniper.net/feature-explorer/feature-info.html?fKey=4161&f=ztp%20e2%80%93%20zero%20touch%20provisioning%20(ez%20touchless%20provisioning%20using%20dhcp))

Product/Application	Introduced Software Release
EX2200	Junos OS 12.2R1
EX2200-C	Junos OS 12.2R1
EX2300	Junos OS 15.1X53-D50
EX2300-VC	Junos OS 15.1X53-D50
EX3200	Junos OS 12.2R1
EX3300	Junos OS 12.2R5
EX3400	Junos OS 15.1X53-D50
EX3400-VC	Junos OS 15.1X53-D50
EX4200	Junos OS 12.2R1
EX4300	Junos OS 13.2X51-D20
EX4300 Multigigabit	Junos OS 18.2R1
EX4500	Junos OS 12.2R1
EX4550	Junos OS 12.2R1
EX4650-48Y	Junos OS 18.3R1
Network Director	Network Director 1.5R1 on Junos Space Platform 13.1P5
MX5	Junos OS 16.1R1
MX10	Junos OS 16.1R1
MX40	Junos OS 16.1R1
MX80	Junos OS 16.1R1
MX104	Junos OS 16.1R1
MX150	Junos OS 17.4R1

(The list of products continues on next page)

Product/Application	Introduced Software Release
MX204	Junos OS 17.4R1
MX240	Junos OS 18.1R2
	Junos OS 16.1R1
MX480	Junos OS 18.1R2
	Junos OS 16.1R1
MX960	Junos OS 18.1R2
	Junos OS 16.1R1
MX2010	Junos OS 18.1R2
	Junos OS 16.1R1
MX2020	Junos OS 18.1R2
	Junos OS 16.1R1
MX10003	Junos OS 17.3R1
NFX250	Junos OS 15.1X53-D40
OCX1100	Junos OS 14.1X53-D20
PTX1000	Junos OS 17.2R1
PTX3000	Junos OS 18.2R1

Product/Application	Introduced Software Release
PTX5000	Junos OS 18.2R1
PTX10002-60C	Junos OS 18.2R1
PTX10008	Junos OS 18.2R1
PTX10016	Junos OS 18.2R1
QFX3500	Junos OS 12.3X50-D10
QFX3600	Junos OS 12.3X50-D10
QFX5100	Junos OS 13.2X51-D15
QFX5110	Junos OS 15.1X53-D210
QFX5120-48Y	Junos OS 18.3R1
QFX5200	Junos OS 15.1X53-D30
QFX5210-64C	Junos OS 18.1R1
QFX10002	Junos OS 15.1X53-D10
QFX10008	Junos OS 18.2R1
QFX10016	Junos OS 18.2R1
QFX10002-60C	Junos OS 18.1R1
SRX300	Junos OS 15.1X49-D100 ⓘ
SRX320	Junos OS 15.1X49-D100 ⓘ
SRX340	Junos OS 15.1X49-D100 ⓘ
SRX345	Junos OS 15.1X49-D100 ⓘ
SRX550 HM	Junos OS 15.1X49-D100 ⓘ
SRX1500	Junos OS 15.1X49-D100 ⓘ